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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,911	TORRES ET AL.	
	Examiner	Art Unit	
	MICHAEL LUX	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/8/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is a First Action Non-Final on the merits. Claims 1-27, as originally filed, are currently pending and have been considered below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-9, 15, and 17-27 are rejected under 35 U.S.C. 102(b) as being taught by Hann (High-Tech Sleuths, November 1998).**

As per claim 1, Hann teaches A method for identification, detection and investigation of maleficent acts, comprising the steps of:

receiving one or more transaction datasets; (the list on p. 84 shows information within the dataset)

verifying each transaction dataset identity and classifying each transaction dataset into a first category, a second category and a third category; (p. 84, Col. 1 teaches running claims against "social security and death records to identify people", p. 84, Col. 3 teaches 3 category classification by score)

detecting and arbitrating ambiguities in each transaction dataset in the second category for reclassifying into the first category and the third category; (p. 84, Col. 3 teaches that adjusters are alerted to claims in the second category [scores above 500], p. 85, Col. 3 teaches that "with a quick review, the adjuster can determine if it's for good reasons or if it needs to be investigated"

examiner construes a need for further investigation to mean that it is reclassified into the third category and claims for good reasons to be in the first category.)

investigating each transaction dataset in the third category for affirming the third category classification of a first group of investigated datasets and reclassifying the third category classification of a remaining second group of investigated datasets into the first category classification; (p. 84, Col. 3 teaches that "claims that hit 800 [the third group] are automatically referred to a special investigator. Examiner construes either affirming third category status or moving the dataset to the first category to mean separating fraudulent claims from the non-fraudulent. This step is implied within the reference.)

enabling transaction datasets in the first category; (p. 84, Col. 3 explains that there is no investigation "on cases that aren't fraudulent", this implies that the first category claims are enabled) and

disabling transaction datasets in the third category (this step is also implied within the reference, on p. 84, Col. 1, Hann discusses identifying people "who died in the last month but are still receiving benefits", this implies that they should not be receiving benefits and that due to the identification of these claims they can be disabled).

As per claim 2, Hann teaches the method wherein the step of receiving one or more transaction datasets further comprises receiving one or more transaction datasets selected from the group consisting of airline reservations, cargo transactions, border crossings, Patriot Act transactions, insurance claims, underwriting insurance transactions, and credit applications (The teaching of Hann pertains to insurance claims).

As per claim 3, Han teaches the method wherein the step of verifying and classifying further comprises verifying each transaction dataset identity by assigning a composite score to each transaction dataset and classifying each transaction dataset by assigning each dataset to the predetermined categories according to each dataset composite score (p. 84, Col. 3 explains that the categories are divided by scores of less than 500, above 500, and above 800).

As per claim 4, Hann teaches the method wherein the composite score assigned to each transaction dataset is determined by combining one or more analytical scores based on a comparison between each transaction dataset and one or more similar datasets located in disparate databases (p. 83, Col. 1 teaches "a system for 'scoring' claims based on the likelihood that they are fraudulent" and further states that the system "can identify complex patterns in data from a host of different sources" where the different sources are disparate databases).

As per claim 5, Hann teaches the method wherein a means for determining the one or more analytical scores is selected from the group consisting of a similarity search engine, a biometric analytic, a rules engine, and a neural net (p. 84-85, teaches "neural network modeling").

As per claim 6, Hann teaches the method further comprising the step of assigning a composite score to each transaction dataset according to a schema defined by a user. (p. 84, Col. 3 explains the composite score system, and in this case the system is defined by the user "Workers' Compensation Fund of Utah", p. 84, Col. 2).

As per claim 7, Hann teaches method further comprising designating an analytic function in the schema selected from the group consisting of a similarity search function, a

biometric function, a rules function, and a neural net function (p. 83, Col. 1 teaches fraud detection based upon "similarity search" technology).

As per claim 8, Hann teaches the method wherein the step of classifying datasets into categories is determined by preset classes, business rules and associations determined by a user to meet specific business needs (p. 84, Col. 2 identifies the specific need, reducing fraudulent claims in workers' compensation, and the category classification is based upon preset classes, business rules, and associates such as prior claims, length of time on the job, multiple medical providers, frequency and amount of reimbursements as well as a high rate of consultations p. 84, Col. 3).

As per claim 9, Hann teaches the method further comprising the step of controlling and monitoring a workflow process comprising the steps of receiving, verifying and classifying, detecting and arbitrating, investigating, enabling and disabling (where receiving the information is an inherent step, verifying is accomplished by running claims against "social security and death records to identify people" p. 84, Col. 1, classifying is done by score p. 84, Col. 3, detecting and arbitrating is done by giving the reasons the claim scored highly and then a subsequent quick review p. 85, Col. 3, investigation is done on all claims scoring above 800, p. 84, Col 3, and enabling is implied on p. 85, Col. 3 with the example of a paraplegic with unusual medical activity that was due to the nature of the injuries rather than fraud, and disabling is implied via p. 84, Col. 1, where Hann discusses identifying people "who died in the last month but are still receiving benefits")

As per claim 15, Hann teaches the method further comprising activating remote similarity search agents in disparate databases to be searched by a similarity search function, the

remote similarity search agents returning similarity scores and results to the similarity search function without a requirement for relocating the searched information from the disparate databases (p. 83, Col. 1 teaches "a system for scoring claims… based on 'similarity search' technology… as 'an entirely new database architecture' that can identify complex patterns in data from a host of different sources").

As per claim 17, Hann teaches a system for identification, detection and investigation of maleficent acts, comprising:

a means for receiving one or more transaction datasets (the list on p. 84 shows information within the dataset);

a means for verifying each transaction dataset identity and classifying each transaction dataset into a first category, a second category and a third category (p. 84, Col. 1 teaches running claims against "social security and death records to identify people", p. 84, Col. 3 teaches 3 category classification by score);

a means for detecting and arbitrating ambiguities in each transaction dataset in the second category for reclassifying into the first category and the third category (p. 84, Col. 3 teaches that adjusters are alerted to claims in the second category [scores above 500], p. 85, Col. 3 teaches that "with a quick review, the adjuster can determine if it's for good reasons or if it needs to be investigated" examiner construes a need for further investigation to mean that it is reclassified into the third category and claims for good reasons to be in the first category.);

a means for investigating each transaction dataset in the third category for affirming the third category classification of a first group of investigated datasets and reclassifying the third category classification of a remaining second group of investigated datasets into the first

category classification (p. 84, Col. 3 teaches that "claims that hit 800 [the third group] are automatically referred to a special investigator. Examiner construes either affirming third category status or moving the dataset to the first category to mean separating fraudulent claims from the non-fraudulent. This step is implied within the reference.);

a means for enabling transaction datasets in the first category (p. 84, Col. 3 explains that there is no investigation "on cases that aren't fraudulent", this implies that the first category claims are enabled); and

a means for disabling transaction datasets in the third category (this step is also implied within the reference, on p. 84, Col. 1, Hann discusses identifying people "who died in the last month but are still receiving benefits", this implies that they should not be receiving benefits and that due to the identification of these claims they can be disabled).

As per claim 18, Hann teaches the system wherein the means for receiving and the means for verifying and classifying comprise a classification engine; the means for detecting and arbitrating comprise an arbitration function; and the means for investigating comprise an investigation function (p. 84, Col. 3 teaches a scoring system for classification, referrals to adjusters for arbitration, and referrals to investigators for investigation)

As per claim 19, Hann teaches the system further comprising a workflow manager for controlling and monitoring a workflow process comprising the means for of receiving, verifying and classifying, detecting and arbitrating, investigating, enabling and disabling (where receiving the information is an inherent step, verifying is accomplished by running claims against "social security and death records to identify people" p. 84, Col. 1, classifying is done by score p. 84, Col. 3, detecting and arbitrating is done by giving the reasons the claim scored highly and then a

subsequent quick review p. 85, Col. 3, investigation is done on all claims scoring above 800, p. 84, Col 3, and enabling is implied on p. 85, Col. 3 with the example of a paraplegic with unusual medical activity that was due to the nature of the injuries rather than fraud, and disabling is implied via p. 84, Col. 1, where Hann discusses identifying people "who died in the last month but are still receiving benefits").

As per claim 20, Hann teaches the system wherein the classification engine, the arbitration function and the investigation function have access to disparate databases through analytic functions (where the analytic function is a "similarity search" working with database structure from a host of different sources, p. 83, Col. 1).

As per claim 21, Hann teaches the system wherein the disparate databases comprise an alias identification database, an expert rules database, a government threat database, public databases, and known threat databases (where claims are run against social security and death records, construed by examiner to be both an alias identification databases as well as a public database; additionally claims are evaluated to see if the length of time is suspicious or if the diagnosis are consistent with fraudulent claims where these databases are construed to be a rules database [the rule being how long a claim must be to be suspicious etc.] and a known threat database [the known threat being a potentially fraudulent claim such as depression], p. 84, Col. 1 and p. 84, Table 1).

As per claim 22, Hann teaches the system wherein the disparate databases contain remote similarity search agents for returning similarity scores and results to the similarity search engine without a requirement for relocating the searched information from the disparate databases (where the "similarity search technology… can identify complex patterns in data from

a host of different sources" implies that there is no relocation requirement for the data, p. 83, Col. 1).

As per claim 23, Hann teaches the system wherein the analytic functions comprise a similarity search function, a biometric function, a rules engine, a neural net, a model engine, an auto link analysis, a decision tree, and a report engine (p. 84-85, teaches "neural network modeling" where the modeling is construed to be a function, p 83 Col. 1 also teaches "similarity search" technology).

As per claim 24, Hann teaches the system wherein the arbitration function includes a user interface for enabling a user to arbitrate the second category classification decisions made by the classification engine into the first and third category classification (p. 84, Col. 3 teaches that adjusters are alerted to claims in the second category [scores above 500], p. 85, Col. 3 teaches that "with a quick review, the adjuster can determine if it's for good reasons or if it needs to be investigated" examiner construes a need for further investigation to mean that it is reclassified into the third category and claims for good reasons to be in the first category).

As per claim 25, Hann teaches the system wherein the investigation function includes a user interface for enabling a user to investigate the third category classification decisions made by the classification engine and the arbitration function and to reassign them to the first and the third category classification (p. 84, Col. 3 teaches that "claims that hit 800 [the third group] are automatically referred to a special investigator. Examiner construes either affirming third category status or moving the dataset to the first category to mean separating fraudulent claims from the non-fraudulent. This step is implied within the reference).

As per claim 26, Hann teaches a method for identification, detection and investigation of maleficent acts, comprising the steps of:

controlling a workflow process for classifying transaction datasets into a high risk category and a low risk category, including the steps of:

verifying and classifying transaction datasets (p. 84, Col. 1 teaches running claims against "social security and death records to identify people", p. 84, Col. 3 teaches 3 category classification by score);

detecting and arbitrating transaction dataset ambiguities ((p. 84, Col. 3 teaches that adjusters are alerted to claims with scores above 500 [detection of ambiguities], p. 85, Col. 3 teaches that "with a quick review, the adjuster can determine if it's for good reasons or if it needs to be investigated" [arbitrating ambiguities]);

investigating high risk transaction datasets for ensuring correct classification (p. 84, Col. 3 teaches that "claims that hit 800 [the third group] are automatically referred to a special investigator);

initiating analytic functions comprising a similarity search function, a biometric function, a rules engine, a neural net, a model engine, an auto link analysis, a decision tree, and a report engine; (p. 84-85, teaches "neural network modeling" where the modeling is construed to be a function, p 83 Col. 1 also teaches "similarity search" technology) and

accessing disparate databases including an alias identification database, an expert rules database, a government threat database, public databases, and known threat databases (where claims are run against social security and death records, construed by examiner to be both an alias identification databases as well as a public database; additionally claims are evaluated to

see if the length of time is suspicious or if the diagnosis are consistent with fraudulent claims where these databases are construed to be a rules database [the rule being how long a claim must be to be suspicious etc.] and a known threat database [the known threat being a potentially fraudulent claim such as depression], p. 84, Col. 1 and p. 84, Table 1).

As per claim 27, Hann teaches the method wherein the disparate databases contain remote similarity search agents for returning similarity scores and results to the similarity search engine without a requirement for relocating the searched information from the disparate databases (where the "similarity search technology… can identify complex patterns in data from a host of different sources" implies that there is no relocation requirement for the data, p. 83, Col. 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hann (High-Tech Sleuths, November 1998) in view of Borghesi (5,950,169).**

As per claim 10, Hann teaches the method wherein the step of detecting and arbitrating ambiguities comprises the steps of:

receiving transaction datasets classified into the second category in the verifying step; (these datasets are the ones referred to the adjuster having scored over 500, p. 84 Col. 3) and

enabling the arbitrator to change the classification of transaction datasets from the second category into a category selected from the group consisting of the first category and the third category (p. 85, Col. 3 teaches that an adjuster can determine if a claim received a high score for a good reason or if it needs to be investigated, Examiner construes claims deemed to be for a good reason to be shifted into the first group and claims that need to be investigated to be the ones put in the third group)

Han further teaches classification (according to score, p. 84, Col. 3) and justification (where "the system gives the reasons the claim scored highly" p. 85, Col. 3) and a search form screen, and a search queue screen (where the search is a "similarity search" and inherent within the search is a form and a queue screen, as the search could not be accomplished without a form and the results could not be viewed without a queue, p. 83, Col. 1)

However, Hann fails to explicitly disclose enabling an arbitrator to view a summary list screen showing transaction dataset identification, status, and links to a transaction dataset detail screen; and

enabling the arbitrator to view a task detail screen for comparing analytical scores between selected transaction datasets and datasets contained in disparate databases;

Borghesi, in the same field of endeavor as Hann [insurance claim management] teaches a summary list screen (sheet 17) showing transaction dataset identification (the list of events), status (where the vehicle state, the status, changed from inspected to assigned), and links to a transaction dataset detail screen (sheet 18 shows the transaction dataset detail from sheet 17, where the transaction detail are listed [352]) and

enabling the arbitrator to view a task detail screen for comparing analytical scores between selected transaction datasets and datasets contained in disparate databases (sheet 16 shows a comparison of analytical scores between selected datasets)

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Hann with the display management screen of Borghesi. Motivation to combine is that users of the Hann software will need to interact with the system in some way and Borghesi discloses a simple user friendly interface for management of large amounts of information, which results in higher productivity and better organization.

As per claim 11, Hann teaches the method further comprising enabling the arbitrator to select an analytic function for determining a comparative analytical score of a selected transaction dataset, the analytic function selected from the group consisting of a similarity search function, a biometric function, a rules function, a neural net function, a model engine and a decision tree (p. 84-85, teaches "neural network modeling" where the modeling is construed to be a function, p 83 Col. 1 also teaches "similarity search" technology).

As per claim 12, Hann teaches the method further comprising enabling the arbitrator to update a classification and status of selected transaction datasets (where arbitrator determining a claim needs further investigation is construed to be a change in classification and status, p. 85, Col. 3).

As per claim 13, Hann teaches the method wherein the step of investigating each transaction dataset in the third category comprises the steps of:

receiving transaction datasets classified into the third category in the steps of verifying and detecting (where the scores of over 800 are classified in the third category p. 84, Col. 3)

a search form screen, and a search queue screen (where the search is a "similarity search" and inherent within the search is a form and a queue screen, as the search could not be accomplished without a form and the results could not be viewed without a queue, p. 83, Col. 1);

enabling the investigator to change the classification of transaction datasets from the second category into the first category and the third category (p. 84, Col. 3 teaches that adjusters are alerted to claims in the second category [scores above 500], p. 85, Col. 3 teaches that "with a quick review, the adjuster can determine if it's for good reasons or if it needs to be investigated" examiner construes a need for further investigation to mean that it is reclassified into the third category and claims for good reasons to be in the first category.) and

datasets contained in disparate databases (via database architecture from a host of different sources, p. 83, Col. 1)

However, Hann fails to explicitly disclose enabling an investigator to view a summary list screen showing transaction datasets containing links to a task detail screen, and enabling the investigator to view a task detail screen for comparing elements of a selected transaction dataset to elements from comparison datasets.

Borghesi, in the same field of endeavor as Hann [insurance claim management] teaches enabling an investigator to view a summary list screen showing transaction datasets containing links to a task detail screen (sheets 17 and 18) and enabling the investigator to view a task detail screen for comparing elements of a selected transaction dataset to elements from comparison datasets (sheet 16 shows a comparison of analytical scores between selected datasets).

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Hann with the display management screen of Borghesi. Motivation to combine

is that users of the Hann software will need to interact with the system in some way and Borghesi discloses a simple user friendly interface for management of large amounts of information, which results in higher productivity and better organization.

It would have been obvious to one skilled in the art at the time of invention to combine the teaches of Hann with the display management screen of Borghesi. Motivation to combine is that users of the Hann software will need to interact with the system in some way and Borghesi discloses a simple user friendly interface for management of large amounts of information, which results in higher productivity and better organization.

As per claim 14, Hann teaches the method further comprising enabling the investigator to select an analytic function for determining a comparative analytical score of a selected transaction dataset, the analytic function selected from the group consisting of a similarity search function, a biometric function, a rules engine, a neural net, a model engine, an auto link analysis, a decision tree, and a report engine (p. 84-85, teaches "neural network modeling" where the modeling is construed to be a function, p 83 Col. 1 also teaches "similarity search" technology).

6. **Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hann (High-Tech Sleuths, November 1998) in view of Examiner's Official Notice.**

As per claim 16, Hann fails to explicitly disclose a computer-readable medium containing instructions for controlling a computer system. However, Examiner takes Official Notice that it is old an well known in the art of software to place instructions for controlling a computer system on a computer-readable medium.

It would have been obvious to one skilled in the art at the time of invention to combine the teachings of Hann with Examiner's Official Notice. Motivation to combine is a hard copy of the software as well as a portable way to transport it from one computer to the next.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LUX whose telephone number is (571)270-5104. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571)-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mpl

/Lynda Jasmin/

Supervisory Patent Examiner, Art Unit 4127